

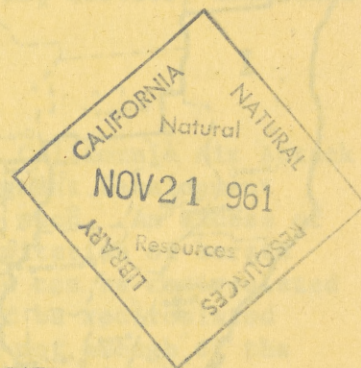
State of  
California

DEPT. OF NATURAL RESOURCES

DIVISION OF FORESTRY

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# NEWS LETTER



Sept. & Oct. 1960  
Vol. 19 - Nos. 9 & 10





STATE OF CALIFORNIA  
DEPARTMENT OF NATURAL RESOURCES  
**DIVISION OF FORESTRY NEWS LETTER**

Published monthly in Sacramento for and by Division personnel. Its pages contain current facts, problems, and events relating to Forestry and to the experiences of Division personnel.


F. H. RAYMOND -


STATE FORESTER

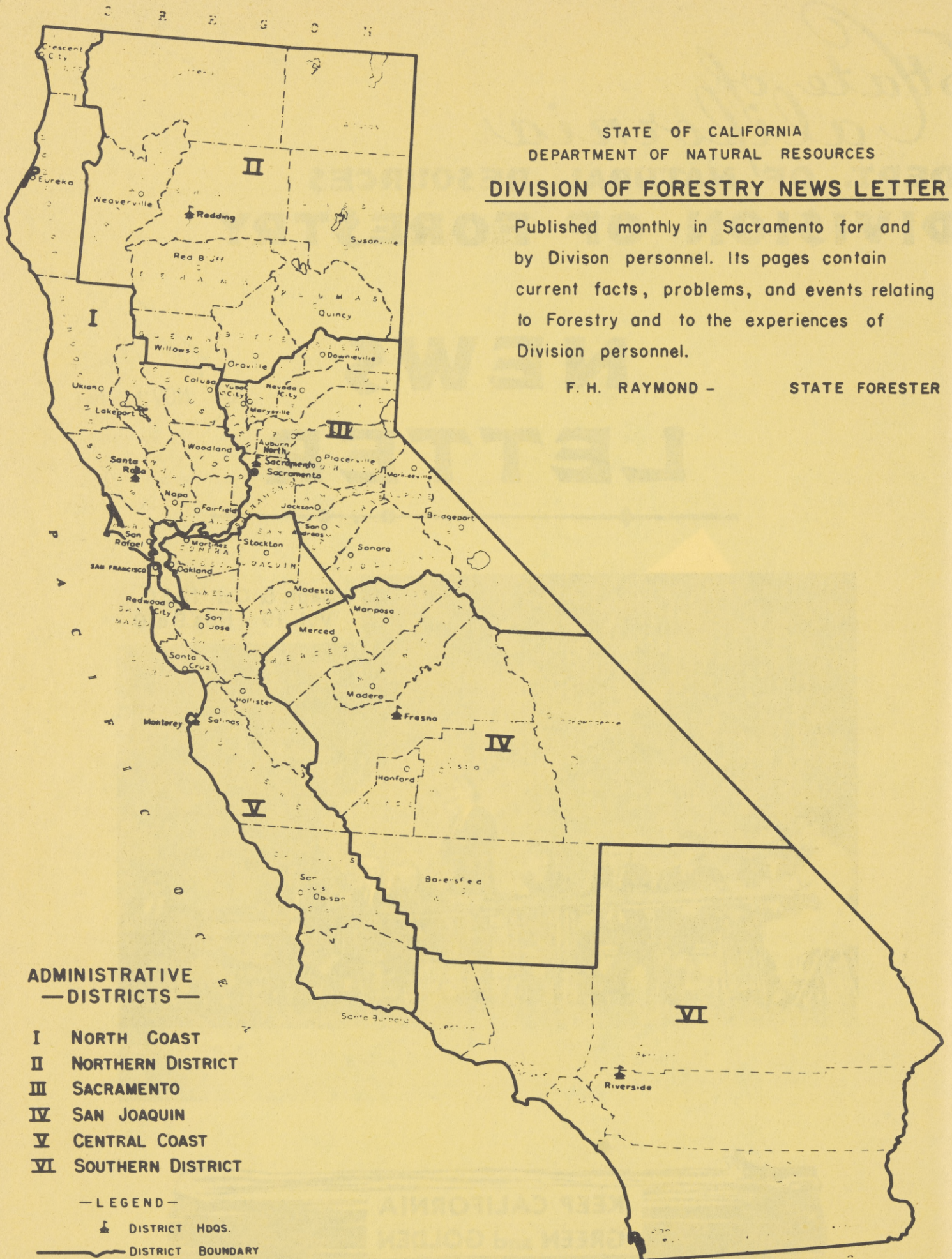
**ADMINISTRATIVE  
—DISTRICTS—**

- I** NORTH COAST
- II** NORTHERN DISTRICT
- III** SACRAMENTO
- IV** SAN JOAQUIN
- V** CENTRAL COAST
- VI** SOUTHERN DISTRICT

**—LEGEND—**

 DISTRICT HDQS.

 DISTRICT BOUNDARY





## AUGUST ACTIVITIES

FIRE SUPPRESSION: Similar to last month, acreage burned in California during August was over 150,000 acres. Also similar to last month, the major portion of the acreage burned was caused by a relatively small number of fires. While there were ten to twelve fires which burned almost 110,000 acres, there were two of the ten or twelve that destroyed approximately 85,000 acres. These were the U. S. Forest Service, Donner Ridge Fire and the joint Division of Forestry - U. S. Forest Service, Homestake Fire.

## FOREST FIRE RESEARCH

Mixing of Borate and Bentonite: At the meeting of the California Air Attack Coordinating Committee in August, Gene Silva of the Arcadia Equipment Development Center noted that borate slurry can be mixed or recirculated too much. An excess of mixing or recirculating will gradually cause more and more precipitation of borate solids to the bottom of the storage tank; therefore, while borate can be recirculated occasionally (perhaps before each contemplated use) it should not be recirculated every day. It is also possible to undermix borate in which case not enough of the dry powder is suspended in the slurry in the first place.

You cannot overmix or recirculate bentonite too much. This material will not drop out of suspension with any amount of agitation. Even so, it may not be desirable or necessary to recirculate bentonite so long as it can be pumped by the available transfer pump.

With the present stage of knowledge, perhaps a good "rule of thumb" for properly thickened bentonite slurry is to stick your hand in the mixed slurry with the fingers extended; upon pulling the hand from the slurry, there should be "webs" between the extended fingers.

Safety Measure in Area of Air Tanker Drops: At the Calairco meeting in August, Gene Silva also reported tentative conclusions from the air tanker drop impact tests made at Chino Airport in June. Danger of injury to ground personnel exists almost entirely from drops which are made from an altitude below 50 feet; however, since ground personnel cannot be certain of the exact altitude at which any given drop will be made, they should take safety precautions as noted below.

The greatest danger to ground personnel is in falling after being hit by an air drop of fire retardant and striking the head or other portions of the body upon the earth. The impact force of the drop itself is not too great and certainly is not lethal to the human body.

If you are about to be hit by an air drop, the best precautions are to (1) lie prone, 2) behind a solid object if possible, 3) head facing into the drop, 4) hard hat on, 5) hang on to some solid object to keep from being carried away and thrown against some solid object. Loose material may be picked up by an extremely low retardant drop and thrown with great force at ground personnel, therefore, you should get behind some solid cover if possible. Do not attempt to outguess the power of the drop and run away. Do not get caught running if and when the retardant hits you since you will be off balance and can easily be knocked off your feet by the force of the retardant. Actually there is only a small area in the center of the drop pattern which has enough force to knock a man down. The impact force of the drop decreases rapidly from the center to the edges.



Pilots should not fly lower than 50 feet in altitude. Any drop made from above this altitude will not have sufficient force to be dangerous to ground personnel.

Pilots should reconnoiter the drop area, if possible, to determine if personnel are on the ground in the drop area, pilots should take special care that they are dropping at least above 50 feet in altitude and are not using a G-load. A dry run in an area containing ground personnel will help to warn the personnel that a drop is about to be made.

Protective Clothing: The Missoula Equipment Development Center of the U. S. Forest Service is currently preparing an interim report on their long-term project of developing survival clothing and equipment for personnel entrapped in forest fires. Several types of aluminized clothing, capes and small canopies were tested in a mass fire at Camp Parks in Alameda County, California, last April. The results of these tests and others conducted by the Missoula Center should be available this fall or winter.

#### FIRE WEATHER AND BURNING INDEX

Detailed information on the thunderstorm radar detection project was prepared and forwarded to the field. This information consisted of several sections prepared by the U. S. Weather Bureau and the Division of Forestry. The Weather Bureau contributed an excellent write-up on the characteristics and limitations of the WSR-57 Radar set. The two agencies jointly prepared a set of operational guidelines for use of the Radar operators and the Division. A recording form for Sacramento and District use was devised and instructions prepared.

Operational use of the radar observations continued through August on an experimental and exploratory basis. The severe thunderstorm outbreak of August 12 and 13 provided considerable practice and made possible some tentative conclusions regarding thunderstorm tracking. During the afternoon and night of the 12th most activity was widely scattered with only isolated areas of intense activity and this mostly over the higher mountains. About 3:00 A.M. of the 13th a surge of colder air moving through an upper level trough of low pressure offshore intruded into the warmer southeasterly flow over the Sierra. The result was the rapid formation of a sharp, well defined line of thunderstorms extending from Sacramento to near Burney. This "squall line" was quite active and caused a few lightning strikes at all elevations as it moved steadily eastward across the Sierras. By 10:00 A.M. of the 13th this line had degenerated into two isolated convective cells on the California-Nevada border near the Sierra Valley. At one time a single cell located in this line was observed to be 12 to 32 miles in horizontal extent.

Any attempt to predict location of thunderstorm activity in advance of such a line or area is a highly complicated process. In the above case the line apparently moved from due west to due east. Yet the plot of the southern end of the line shows that end moved from almost due southwest to northeast. The northern end of the line had a tendency to move from the northwest to southeast. Within the line itself the thunderstorm cells were moving from the south-southwest at about 20 m.p.h. There are indications that thunderstorm activity at other times may also follow this complex pattern.

In the above case we were able to provide about 1½ hours advance warning for the northern end of District III. This area had been completely free of thunder-



storm activity during the 12th and early morning of the 13th. The detection of the "squall line" did not materially aid District II since their personnel were already busy taking care of scattered lightning strikes which occurred during the afternoon and night of the 12th and early hours of the 13th. About all the report meant to them was that more lightning was on the way.

#### WATERSHED MANAGEMENT - P.L. 566 AS AMENDED

The State Forester's office was represented on the field inspection trip of Public Law 566 and related projects throughout the North Coast, Central Coast, and Southern California areas during the first three weeks of August.

Personnel from this function assisted in the suppression efforts on the Forest Hill fire, and in the development of the Forestry displays at the State Fair.

#### FIRE PREVENTION

Plans were completed for the California Division of Forestry and U. S. Forest Service to participate in the Bay Area Counties "Sigalert." Whenever emergency conditions arise where large numbers of residents of the Bay Area are affected, the San Francisco Police Department immediately inform all radio and television stations who in turn broadcast pertinent information concerning the emergency.

An exhibit, in cooperation with other sections of the Division, was planned and constructed at the State Fair.

A program was worked out with Sacramento radio station KRAK whereby the station sponsored a forest fire prevention slogan contest during the State Fair. Entry blanks were produced by the station, with a number of ballot boxes being placed on the State Fair Grounds. During fair time the station made regular broadcasts featuring fire prevention and the contest.

A meeting with Pacific Southwest Forest and Range Experiment Station and University of Southern California personnel was attended by the Division's Forest Fire Prevention Research Committee. Plans for the 1960-61 program were considered.

#### FOREST PRACTICE

A tour of logging operations in Sonoma, Mendocino, and Humboldt Counties was made by representatives from the Department of Fish and Game and the Division of Forestry on August 9-11. The purpose of the trip was to observe and consider practices of joint interest with regard to erosion control and stream clearance on logged areas. An increasing number of operators are showing a desire to prevent damage to soil and fish life, but there is need for further improvement.

The Coast Range Pine and Fir Forest Practice Committee met in Redding on August 24 with timber owners and operators to discuss proposed revision of the forest practice rules for that district, consider an alternate plan and handle other pertinent business. This was the first committee meeting for newly appointed committee members Albert L. Fearien of Hydesville and Harold Raymond Crane, Jr., of Corning. The committee plans to meet again in late October to develop a draft of proposed rule amendments to be used at public hearings to be held throughout the district shortly thereafter.



## STATE FORESTS

Representatives of the Division of Forestry and the Pacific Southwest Forest and Range Experiment Station completed most of the field work for an intensified soil-vegetation survey of the Latour State Forest. Conservation Camp crews are excavating permanent soil sample sites of the representative soil series found on the Forest. The knowledge that is being gained about soils on the Forest and their capabilities for growing timber will be of tremendous value in developing the future management of the property.

## NURSERY

As the fall seed collection program progresses, over four hundred burlap sacks of cones, consisting mostly of Douglas fir, have been received at the Davis headquarters nursery. Cones are being collected throughout the State by Division field personnel and inmates and wards of Conservation Camps; some are being purchased from local residents in the timbered areas. It is hoped that a sufficient amount will be obtained to supply the nursery and reforestation studies programs for several years in the event of future cone crop failures.

The Seventh Biennial Meeting of Western Forest Nurserymen sponsored by the Western Forestry and Conservation Association was attended by a member of the State Forester's staff. The meeting was held August 17 and 18 at the Forestry Service Savanac and Cour d'Alene nurseries in Montana and Idaho, respectively. Approximately 60 forest nurserymen, forest researchers, and foresters concerned with forest regeneration problems were in attendance. Some topics discussed pertained to forest tree seed certification, seed orchards, and seed production areas, nursery soil fertility and soil fumigants, methods used to produce high-quality planting stock, and cold storage of stock. The two nurseries and respective facilities were toured. The Savanac nursery is the oldest in the west having been in production since 1909. Production has fluctuated from one million trees to 12 million. Present production is about 5 million. The Cour d'Alene nursery is new, the first seed having been sown in the spring of 1960. Two hundred nineteen acres were purchased, 120 of which have been cleared providing a capacity of from 30 to 40 million trees.

## SEPTEMBER ACTIVITIES

FIRE SUPPRESSION: The month of September was characterized by two severe lightning storms, one on the 2nd and 3rd and the other on the 9th and 10th. These two thunder and lightning storms cause 248 fires on those lands of State-wide interest (Zone I and II) that are protected by the State Division of Forestry. Although the fire-fighting crews were hard pressed, spread pretty thin, and on the go continuously to locate all the lightning strikes and control the fires caused by them, the absence of wind, along with some scattered showers and high humidities helped hold the acreage loss to an absolute minimum.

In addition to the 248 lightning-caused fires mentioned above, there were 444 man-caused fires, or a total of 692 recorded forest fires. These fires destroyed 7,787 acres of timber, watershed, recreation and range lands.

Listed below, for comparison purposes, are the number of forest fires and acres burned (in Zone I and II) during September of the years 1954 through 1959, and the average for this six-year period.



Year	Fires	Acres Burned
1959	328	4,415
1958	579	56,011
1957	450	42,273
1956	295	116,423
1955	311	118,292
1954	322	16,332
TOTAL	2,285	243,746
AVERAGE	381	40,624
1960	692	7,787

#### INTERIM FOREST FIRE REPORT FOR 1960

For the period January 1st to September 30th, 1960, there were 2,614 forest fires that burned a total of 118,069 acres of timber, watershed, and range on lands ( Zones I and II) directly protected by the Division. Of these fires, 405 were started by lightning, and 2,209 were man-caused. This is the second highest incidence of fire on record, and in comparison to the January 1 to September 30, 1950-59 average, an increase of 25.5 per cent.

In spite of the record breaking fire occurrence and the cumulative effects of the adverse dryness during the past three years, the 118,069 acres burned in Zones I and II, this year, is 2,141 less than the January to September 30, 1950-59 average.

#### FOREST FIRE STATISTICS for the Zone I & II Area Directly Protected by the California Division of Forestry

Year	Lightning Caused	Man Caused	Total No. Fires	Acreage Burned
1950	157	1,849	2,006	280,332
1951	298	1,661	1,959	138,558
1952	182	1,745	1,927	93,977
1953	144	1,596	1,740	57,118
1954	62	1,663	1,725	124,597
1955	140	1,538	1,678	147,308
1956	173	1,308	1,481	43,091
1957	86	1,821	1,907	116,894
1958	473	1,977	2,450	99,953
1959	180	2,447	2,627	121,085
TOTAL	1,895	17,605	19,500	1,222,913
AVERAGE	190	1,760	1,950	122,291
1960	405	2,209	2,614	118,069

All of these figures are for the period January 1 through September 30th.



## fires

In addition to the primary timber-watershed/listed on the previous page and a multitude of mutual aid, to other agencies; i.e., U. S. Forest Service and National Park Service, many of the City Fire Departments, Fire Protection Districts, Military Reservations and Bases, Independent Counties, and other State Agencies, the State Division of Forestry provides structural protection in Zones I and II and structural and agricultural fire protection service in Zone III.

The following table summarizes this complete fire protection work load for all types of fires in all zones up to September 30, 1960.

<u>Zone</u>	<u>Number of Fires</u>	<u>Acreage Burned</u>	<u>Estimated Damage</u>
Forest-Watershed (Zones I & II)	2,614	118,069	\$731,828
Structural (Zones I & II)	1,286	--	2,870,037
Agricultural and Structural Zone III	4,577	5,975	4,147,279
<b>TOTAL</b>	<b>8,477</b>	<b>124,044</b>	<b>\$7,749,144</b>

In considering the over-all conditions, the fire control forces, initial attack, follow-up forces, plus the many cooperating groups, did a remarkable job in holding down the acreage burned to an absolute minimum.

### FIRE PROTECTION: STATE-FEDERAL COOPERATION

Annual inspections of State Cooperation (Green Book) initial attack crews were made on the Los Padres National Forest with the Deputy and Assistant Deputy of the Central Coast area.

Inspections were also made of the crews on the Lassen and Plumas National Forests in company with the Fire Control Ranger of the Sierra-Cascade area.

All crews were being maintained at maximum strength and due to the critical fire weather, many crews were being strengthened by emergency manning of personnel and equipment.

### FIRE PROTECTION: STATE-COUNTY COOPERATION

The Deputy in charge of the San Joaquin District and the State-County coordinator from Sacramento office represented the Division of Forestry at the California State Firemans' Association meeting in Redding during the September 7th through 11th period. The coordinator also spent one day at the North Coast District Headquarters office reviewing Fire Protection District Acts; matters pertaining to Fire Protection Districts and volunteer fire companies with the Assistant Deputy and the Ranger and Associate Ranger of the Humboldt Ranger Unit. Considerable work has been done and progress is being made on a revised fire plan for Kings County where the Division of Forestry administers a county fire service organization.

### FOREST FIRE RESEARCH - FIRE RETARDANTS

The two new fire tools were introduced this summer: viscous water and bentonite foam. Firetrucks being used to test the effectiveness of these potential



fire retardants have been involved in far fewer forest fire actions than would normally be expected. This low fire occurrence around the fire stations involved in the program simply has not provided enough opportunity to satisfactorily evaluate the retardant materials. Consequently, it is likely that further tests will be conducted in 1961, perhaps from additional stations.

At least one of the viscous water agents being tested, algin, has provided a couple startling experiences which were favorable, but which require additional cases for support. The Flinn Springs crew in San Diego County reported on September 9th: "Rolled to a hay fire at the Flinn Springs Garage. There was a load of 13 tons on the truck. It is believed the algin had a very good effect on the hay. It seemed to hold the moisture in the hay. The fire was extinguished within 30 minutes, a fast time. About 2/3 of the hay was involved."

Another Flinn Springs report of September 11 said, "Responded to a structure fire. Upon arrival, three volunteer fire department units were already there. The structure, a split level woodframe house, was one-half involved and burning very good. From the initial use of algin solution the fire was rapidly knocked down and no problem of heat build-up was encountered after application. Five hundred gallons of algin was used to knock the fire down after which 2,000 to 3,000 gallons of plain water was used. The fire was well under control 30 minutes after the algin was initiated on the fire. Progress of the fire was halted at first application of algin. After the fire was out, an inspection showed everywhere the algin had been used was a thick film of wet solution."

"A day later another inspection was made. On vertical walls (interior and exterior), rafters, atop the roof, and on contents, a thin dry film was found in many places indicating the wet algin solution applied on the fire definitely stuck to the surfaces. It was found on surfaces that were well burned. In such places the film coated the surface in cracks and wood grains where fire had been. In some places this film was very thick. The debris and charred remains found after most structural fires were still moist. On mop-up, this debris is usually dug up and wet down good. On this fire, this procedure was not followed. No hot coals or smokers could be found in the debris."

#### PRATT MT. HELITACK CREW

The helitack crew located at Pratt Mountain in the Humboldt Ranger Unit closed its season on September 30. A full evaluation report will be published sometime this winter. The preliminary report gives the crew considerable credit for reducing the size of several fires which they were able to reach quickly and for preventing at least one probable campaign fire. In the latter case the crew was flown within a couple minutes to a fire spreading rapidly in grass toward an extensive area of slash; they held the fire to a quarter of an acre. It is estimated that the nearest ground crew could not have reached the fire in less than two hours and would have had a large fire on their hands at the time of arrival. The nearest air tankers were 40 minutes away.

The Pratt Mountain Helitack Crew used an Allouette Helicopter this season which made it possible to transport the entire crew of four men with their tools. Because of the short period of use (August and September) due to budget limitations, the crew did not attempt to learn the finer points of making hoselays or helijumps or to use such accessories as the helitank and helichute. The North Coast District II tentatively plans to send personnel to Los Angeles during the coming winter to train in all the aspects of helitack operation under the experienced tutelage of the



Los Angeles County Fire Department and the Angeles National Forest's Chilao Helitack crews.

It is believed that the lessons learned with the Pratt Mountain Helitack Crew in 1960 and the refinements which they hope to effect in 1961 will provide the Division of Forestry with another fire fighting tool which appears able to pay off in speed of attack and consequent reduction in fire size and damage.

#### WATERSHED MANAGEMENT

The State Division of Forestry was represented at the monthly meeting of the State Soil Conservation Commission.

A meeting with the sponsors and interested agencies of the Ulati Creek Public Law 566 project was attended in Fairfield to evaluate planning thus far completed. The results of the Fire Protection Study on the Ulati Creek Project has been submitted to the State Division of Soil Conservation with copies to the U. S. Forest Service and Deputy District involved.

This office was represented at a meeting of agencies interested in the sedimentation production of the San Antonio and Nacimiento watersheds above the Nacimiento reservoir.

Technical assistance was furnished the Santa Cruz Ranger Unit in the development of a fire protection reconnaissance study of the Newell Creek Watershed, which is a Davis-Grunsky proposal; and the preparation of an outline for a fire protection study of the Corralitos-Salsipuedes watershed, which is a Public Law 566 proposal.

#### FIRE CONTROL-GENERAL

A review of emergency fire expenditures as of September 9 indicates that actual expenditures plus outstanding obligations total \$609,700. A budget revision is being prepared to obtain additional funds from the Governor's Emergency Fund to supplement our present allotment of \$320,000. This budget revision includes a projection of approximately \$120,000 for the balance of the 1960 fire season and the 1961 spring fire season.

A rough draft letter was sent to the Governor in order that he might request assistance from the Secretary of Defense to implement our proposal for the use of C-119 flying box cars for the movement of personnel along with their equipment to fires. This would permit the movement of one or several fire trucks along with its regular crew from one District to another in a matter of a couple hours instead of the present 10 to 20 hours.

#### CIVIL DEFENSE

Two Division of Forestry Districts, the Central Sierra District and the Southern Sierra-San Joaquin District, participated in a Civil Defense exercise on September 16 and 17. The exercise stressed fall-out problems, but also covered public information, operational information, and communications. All Ranger Units in the Central Sierra District reported fall-out readings twice on the 16th and once on the 17th. The communications mobile van was used for the first time in the Southern Sierra-San Joaquin District (California Disaster Office Region 5 is located in Division of Forestry Southern Sierra-San Joaquin District).



## FOREST FIRE EQUIPMENT

Bid forms are being prepared for transmittal to prospective bidders covering construction of 37 fire trucks.

Bids have been prepared and transmitted to the prospective bidders for the construction of seven slip-on tanker units and six bulldozer service units. Bids will be opened on October 10, 1960.

## FIRE PREVENTION

All Districts continued fire prevention activities with exhibits at County and District Fairs and the State Fair consuming many man days.

Division personnel assisted in judging entries in radio Station KRAK's forest fire prevention slogan contest. Division personnel assisted TV Station KCRA, Channel 3, in preparing 28-minute motion picture film, "Black Harvest", for television showing by that station and others who are interested. The film high lighted the Donner Ridge Fire.

## FOREST PRACTICE

Three alternate plans were approved by the Board of Forestry in San Francisco on September 30, 1960. One plan permitted a departure from the cutting rules of the Coast Range Pine and Fir Forest District to improve spacing between trees on land of Theodore A. Carlson in southwestern Trinity County. Two other plans were renewed which had terminated when the North Sierra and the South Sierra Forest Practice Rules were amended. One plan was for the intensive management of Christmas trees on lands of J. Hofert Company in Nevada County and the other plan was for improving the quality of timber on the property of Mrs. Fay M. Gunby in Placer and Eldorado Counties.

## STATE FORESTS

The Caspar Creek experimental young growth logging study has been completed for 1960. This is located on the Jackson State Forest in Mendocino County. This involved two different treatments, a "light selection" cut on one area, and a "heavy selection" cut on another. 1,235,000 board feet were removed and sold as decked for \$36,446.82. Slash disposal and erosion control work will be completed as "Conservation Camp crews are available."

## NURSERY

Shipping of stock from the Division's four forest nurseries will commence about the first of December. Price list-order blanks for the 1960-61 season for ordering this stock were distributed to field offices. Orders from prospective tree planters will be accepted on a "first come-first serve" basis; approximately 3,400,000 trees are available.

Asfall cone collection activities reached their peak 2,223 sacks of cones were received at the Davis headquarters nursery for processing to produce an estimated 5,000 pounds of clean seed. Cones are being gathered by Division field crews and inmates of the Conservation Camps. Where facilities are available some cones are being dried and seed extracted at the Conservation Camps, the rough-clean seed to be shipped to Davis for further processing and storing. Some 29 sacks of this rough-clean seed were received.



## REFORESTATION

Foresters representing industry owned timber lands on which large fires occurred the last two fire seasons have indicated an interest in planting at least a portion of the burns. Two companies have made a request for a sufficient number of trees to plant 1,500 acres.

Cooperative reforestation studies were continued on the two studies projects in Calaveras County; one a 1959 burn and the other in a poorly stocked stand of timber invaded by a dense ground cover of bear clover. To study the effectiveness of establishing seedlings from natural seed fall rodent proof seed traps were set out to sample quantities of seed produced from residual mature trees left on the areas. Mouse traps were set out also to sample the rodent population, and rodent control measures put into effect.

## PEST CONTROL

On September 7 a pest-control aerial survey was made by the personnel from the Pacific Southwest Forest and Range Experiment Station and the Division of the Hat Creek area where cooperative bark beetle control work was done by the Division this past spring. Results of the survey indicate that the control work was highly successful.

A joint meeting of the Insect Committee of the Pacific Northwest and California Forest Pest Control Action Councils was held in Lakeview, Oregon, and Modoc County, California, at which Division personnel were in attendance. Forest insect problems common to southeastern Oregon and northern California were reviewed. The insects involved are the spruce bud worm, mountain pine beetle and needle miners attacking ponderosa and lodgepole pine. The European pine shoot moth, recently discovered on the West Coast (Seattle-Tacoma area), came in for considerable discussion. A meeting is scheduled for October 19 for Pacific Coast forestry and agriculture agencies to consider eradication and quarantine possibilities for this insect. This insect has been recently found on ornamental pines and pine nursery stock in Washington and Oregon and poses a threat to the production of pine timber on the West Coast.

The Disease Committee of the California Forest Pest Control Action Council met at the Pacific Southwest Forest and Range Experiment Station, Institute of Forest Genetics, to discuss forest nursery forest plantation diseases. A tour was made of the Forest Service Placerville nursery located near the Institute of Forest Genetics where some five million seedlings are produced and where seedlings have suffered heavy mortality from soil borne fungi this season. Of particular concern was a small area infection of a fungus known in the southern states as "little leaf" which destroys mature trees in many of the forest plantations in that area. Also observed were areas in the arboretum of the Institute where very valuable trees used as sources of pollen and grafting stock had been destroyed by another fungus which attacks the roots of mature trees. Control measures for both these fungi were discussed. The committee formulated a recommendation to be presented to the California Forest Pest Control Action Council that an inspection system be put into effect to check all major forest nurseries in the State so that no stock will be shipped out of any nursery that might be infected with the fungus causing the "little leaf" disease.



## RESEARCH

A meeting of the Advisory Committee on Forest Research to the State Board of Forestry was held in Berkeley on September 29, 1960. Discussions of the proposed Division of Forestry forest and fire research budget, and the functions of the Advisory Committee were led by Chairman Robert Radford. The status of the California Wildland Research Plan and progress toward fulfillment of the plan were discussed by Dr. Keith Arnold, Director of the Pacific Southwest Forest and Range Experiment Station and by Dr. Henry Vaux, Dean of the University of California School of Forestry.

## SOIL-VEGETATION SURVEY

The Soil Conservation Service State Soil Correlator and others correlated the soils being mapped in Humboldt and Shasta Counties by the State Cooperative Soil-Vegetation Survey. The soils recently mapped at Latour State Forest were also correlated.

## EMERGENCY REVEGETATION

Plans were firmed up to seed approximately 8,000 acres of denuded private land in Southern California. The seeding will be carried out in cooperation with the Forest Service and Los Angeles County. The Monterey Flood and Water Conservation District is cooperating with the Division and the Bureau of Land Management in seeding 10,000 acres of the Weferling burn.

## ENGINEERING

On September 19 Mr. Petersen attended the meeting of the Wildlife Conservation Board in Eureka. The following projects were approved to be accomplished by the conservation camps: Fish Lake public fishing area. This consists of improving an existing lake and will be accomplished by the Crystal Creek Camp. Santa Cruz Coastal Stream Clearance Project: This is a continuation of a project started last year by the Ben Lomond Youth Camp, and affects about 10 creeks in the area. Big River Stream Clearance Project: This work will be accomplished by the Parlin Fork and Chamberlain Creek Camps.

We have had several meetings with the representatives from the Division of Architecture pertaining to the commencement of planning for the 1961-62 budget estimates. In addition to the District V office, they have assigned Architects to all 1961-62 major projects and the architects in turn have scheduled field visits for the Sea View Conservation Camp site and for the Groveland Forest Fire Station site. In addition to the major 1961-62 projects, we have requested limited assistance from Architecture for the completion of plans for Yucca Valley forest fire station and for the residence and equipment building at the Covelo forest fire station. Architecture has also scheduled a field trip for the District I headquarters addition.

We have received the necessary court orders releasing certain property from a prior adverse judgment. This property was part of the four parcels being gift deeded to the State for the Yucca Valley forest fire station. We are currently attempting to obtain Finance's approval for the acceptance of these gift deeds even though they name in addition to the State of California, the Division of Forestry. If we are unable to obtain this approval, it will be necessary to amend our reference to the Division of Forestry. The gift deeds are being prepared for a review and recommendation by the Board of Forestry at their next meeting.



Ground breaking ceremonies for the Conservation Center in Susanville were attended by Director DeWitt Nelson, George Grogan, Herb Kaufner, Harry McKeen, and Petersen. The Governor and party was about an hour late, otherwise everything went off as scheduled. Mrs. Pauline Davis made special mention that she wanted to see in Forestry's and Fish and Game's budgets sufficient funds to make effective use of the men to be made available by this center.

The Camp Section is working on the revision of the booklet entitled, Study on Prison Labor and Forestry Camps. This is to be reissued by the Senate Fact Finding Committee on Governmental Efficiency. This Committee is chairmaned by Senator Arnold. In reviewing the previous report with Mr. Paul Ward, Secretary to Senator Arnold, it became evident that we have accomplished most of the recommendations made by the previous committee. He was, therefore, very interested in what recommendations we had to offer for improvement to the program. In light of the memorandum of Tobe Arvola to Director Nelson on the subject of planting burns, it would appear that we have an excellent opportunity to correct these deficiencies.

PACIFIC SOUTHWEST FOREST & RANGE EXPERIMENT STATION, SAN DIMAS EMERGENCY RESEARCH PROGRAM - 5th WEEKLY REPORT - October 14, 1960.

1. A small storm occurred Sunday night, October 9, and provided a preview of things to come. The debris basins for Bell small watersheds #s 1, 2, and 3 were filled. The three-foot flumes in watersheds 8, 9, and 10 were closed and became plugged. Debris went through the gaging stations so fast and so dry that stilling wells did not fill, and peak measurements will have to be estimated.
2. Grass seed for Fuelbreak studies and watershed revegetation is arriving by the truckload. The Don Lugo Conservation Camp crew has been unloading and storing this seed. Bids for helicopter seed application were returned Friday, October 14. Complex planting layouts continue, such as three replications of plots, 4 chains wide and 30 to 45 chains long which replication will be broadcast with 14 individual or mixtures of grass species. In addition to grass plot plantings, small watersheds have been flagged for broadcast sowing while others will be machine drilled.
3. Contour terracing continues. A second tractor will be obtained to expedite the job.
4. Charles Graham has started testing of soil stabilization chemicals.
5. The Los Angeles County Fire Department juvenile crew is clearing dam sites for the small watersheds and is also clearing the debris from Big Dalton streamgaging station flumes.
6. The installation of a plastic ground cover for study of lateral soil water movement has been completed.
7. A few weeks ago we were considerably concerned as to whether we could finance the construction of debris basins for all 25 of the watersheds in the new study to compare emergency site treatments. Now that this planning is well under way and the first of the dams is about to be constructed, we are pleased to find that Angeles engineer Val Lund and his survey and planning crews have been able to devise and design practical and inexpensive debris basins, and the possibility of building all 25 now appears agood.

Walt Hopkins, Chief  
Division Watershed Management Research





#### NATURAL OR MAN CAUSED?

NOW, THAT IS A SWITCH!

All California Foresters of this generation have heard the present-day "old-timers" tell how the Sierra forests used to be much more free of brush and undergrowth than they are now. These sincere, earnest, and sometimes vociferous people usually believe that this open condition was the natural and proper one, and that the present thick growth of young trees and shrubs decreases stream flow and indicates mismanagement of our forest lands. The following quotation of nearly 65 years ago describes a public viewpoint completely the reverse of that philosophy. It is from "Forest Reservations: with a Report on the Sierra Reservation, California", by William R. Dudley, in the Sierra Club Bulletin of January, 1896, pages 254-267.



"The general testimony of the mountain and foot-hill people in regard to the changes that had occurred during the past ten or twenty years in the vegetation of the mountains is not uninteresting. They assert that the undergrowth in the mountain forests has greatly decreased since sheep-herding came into the mountains. At present one can ride a horse anywhere through these high mountain forests, excepting in the inaccessible rocky places; while twenty years since it would have been almost impossible to have wandered far from the trails, on account of the underbrush, undoubtedly more dense than in the Northern Sierras. The sheep live on the young twigs of these undershrubs and on the small annual plants under the trees. The herders add to this destruction, as they pass out of the forest in the autumn, by setting fire to this undergrowth, in order to insure an abundant growth of tender sprouts in the spring following. The ranchmen believe this decrease in the undergrowth decreases the streamflow in the valleys below during the summer, the water from the melting snows having little to hold it in check. They regarded the destruction of the underbrush as more detrimental to the stream-flow than the destruction of the timber... Formerly many living springs were to be found on the ranches of the White River Valley, all of which now run dry in midsummer."

Apparently the "good old days" are the days of our youth, and they change with every succeeding generation.

NOTE: It should be mentioned that Professor Dudley's statement was based on more than casual knowledge. He and Frank Lamb of Stanford University spent July and August of 1895 zigzagging through the White River, western Kern, Tule and Kaweah River forests from Glenville north to Sequoia National Park. He says, "Whenever we met a native rancher of the foot-hills, or the hunter and camper from the valleys, we discussed the utility and desirability of the reservations, and endeavored to get their point of view." They also collected 800 species of plants and Dudley goes into detail in describing the vegetation around Summit Lake at the head of Wishon Fork (North Fork of the Middle Fork) of the Tule River. (He called it Mountain Lake, and, in common with other travellers and map-makers of that time, he called the Wishon Fork the Middle Fork. What we now refer to as the Middle Fork, was then called Nelson's Fork).

Floyd Otter, Forest Technician  
Mountain Home State Forest

#### COVER PAGE

Left to right:

Miss Nell Weldon  
Kelly B. McGuire  
Paul Aurignac  
J. J. Prendergast  
Francis H. Raymond  
Kenneth R. Walker  
W. B. Carter  
E. P. Ivory  
Frank C. Myers  
DeWitt Nelson

Recording Secretary  
Redwood Producing Industry  
Range Livestock Industry  
Beneficial Use of Water  
State Forester and Secretary of Board  
Pine Producing Industry - Chairman  
General Public at Large - Vice Chairman  
Forest Land Ownership  
Agriculture  
Director, Department of Natural Resources



REPORT OF THE COOPERATIVE FOREST FIRE PREVENTION PROGRAM - CALENDAR YEAR 1960 by  
JOHN BEALE, WISCONSIN CHAIRMAN: AUSTIN WILKINS, C. B. MARLIN, AND GEORGE ZAPPETTINI

While we still have several potential forest fire months to go, the year 1960, should go down in history as another year with man-caused forest fires below the 100,000 mark. This will be the fourth year in a row that man-caused fires were kept under this rather dubious mark of achievement. In 1957, we had 77,733 man-caused fires. In 1958, we had 87,082 fires, and in 1959, we had 97,418 fires. So far in 1960, we are about equal to the 1958 forest fire figures and should end up with 10,000 fewer man-caused forest fires than last year.

With fire hazards very high in the summer of 1960, especially west of the Rocky Mountains, this is a very remarkable record. It shows that our forest fire prevention program has definitely taken hold. From July 14 to July 28, the Forest Service alone mobilized some 25,000 men on forest fires - a series of lightning fires and the early dry season had combined to make near disastrous conditions. Over 220,000 acres were burned over during this period, equal to the entire acreage burned in 1959, on the Forest Service protection area. Had there been a rash of man-caused forest fires, the year 1960, would have celebrated the 50th Anniversary of the 1910 Big Blow-Up with a bigger Blow-Up of its own.

I point out these facts because we still are not giving the support to the Smokey Bear campaign that we should give to it. We need to be more cognizant of the advantages of the Smokey Bear Program. A generation of people will soon be educated to be careful with fire. They are also showing great interest in the outdoors and have learned to enjoy and respect the nation's forests. What are we doing to follow-up on the interest created by Smokey with a conservation education program? Smokey will try to emphasize multiple-use in connection with forest fire prevention in 1961. How many of us have given thought to adult education along these same lines? The Smokey Bear Program is weak in its appeal to teen-agers and young adults. This Association needs to give some thought as to how to reach this group, not only with forest fire prevention material, but with attractive conservation education material.

We also need to give more thought to what the Smokey Bear Program is costing us. Many items that we formerly produced for the Smokey Bear Program have become very expensive and we have stopped printing them. Your Committee needs to spend more time in analyzing whether or not these are worth the expense. How do you feel about our dropping the wobblers, the large easel and the bumper strip from the free distribution list? I'd be glad to discuss these matters with any disgruntled client. But I'm sure you know that the CFFP Committee has worked hard to make this program a success. As my four-year term of membership comes to a close, I can look back with only one regret, and that is that I didn't have more time to communicate with you fellows on the Smokey Bear Program. It is an important program and one on which we should spend more time and money. I believe we have only scratched the surface on the use of Smokey.

Your CFFP Committee has tried to furnish you with a good selection of Smokey items for each annual campaign. Yet you know that it is hard to make a nationwide selection that will satisfy every area of the country. If you can't use an item, please don't order just because it is free. We can use every dollar of Smokey's funds. We have been operating on the same budget since calendar year 1957, and as expenses go up, we have had to cut down on the number of free items. This is putting the squeeze on the states with the smaller allotments. Television and motion picture production has gone up about 25% during the last three years. Radio production has increased and so has printing costs. But the latter not as much as might be expected. This is due in part to many states and regions buying more



printed items. Last year \$50,000 worth of printed material was purchased. The total amount expended on printing in fiscal year 1960, was \$159,000. This is \$9,000 more than our entire CFFP budget in 1952.

Special items such as the wobbler, large easel and other die-cut items have been reduced in numbers or eliminated to give you more material such as the stuffer and Smokey decals. We are trying to furnish more material for the same money and are doing it by producing less expensive items.

We need to give more thought to the distribution of some 30 million pieces of Smokey items to the various shipping centers and see that Smokey material isn't buried for months in some warehouse when it could be put to good use - selling forest fire prevention.

We could go on soul-searching and discussing ways and means to improve the CFFP Program. Yet actually we haven't done so badly over the years. Next year, 1961, will be the 20th Anniversary of the Cooperative Forest Fire Prevention Campaign. This program has already been launched and you have requisitioned the material you will need. The men responsible for this year's Smokey items and for the Smokey material during the past nineteen years will be honored by this Association and the Forest Service for this excellent public service contribution to the conservation of our natural resources. We have been extremely fortunate in having Foote, Cone & Belding as the advertising agency handling the Cooperative Forest Fire Prevention Campaign. We have all enjoyed working with them and have benefited from our associations with them and The Advertising Council. Together we have made the Cooperative Forest Fire Prevention Program one of the finest public service campaigns in history. It is used as an example of federal and state governments working with private enterprise for the nation's good. It has reduced forest fires and it has gained statue for conservation and the men working in the Conservation field. But perhaps we can best show accomplishments by reviewing what has happened so far in 1960.

#### HIGHLIGHTS OF 1960

In January, Elmer Osterman of the California Division of Forestry came in to Washington, D.C., to help with the Smokey Bear Program. He did such a good job that Joel Marsh of the Maine Forest Service came in to help out in February. George Kyle and George Reynolds, new employees of the Forest Service, but formerly with the states of Alabama and Wyoming, also took part in the new executive consultation plan, which makes an exchange of ideas between the field and Washington Office personnel possible.

It is hoped that Frank Craven of Georgia, Charles Shott of Mississippi, and Walt Ahern of South Carolina can participate in this consultation program in 1961.

The Advertising Council reported that Smokey made 2 billion home impressions on TV last year.

On February 2, 1960, the 10th Birthday of the live Smokey was celebrated at the National Zoological Park.

On March 2, a costumed Smokey attended the President's Conference on Occupational Safety and gave a talk on care with fire.

The animated Smokey Bear exhibit, after a successful tour of Oregon and Washington, made an appearance at the Home Show in the District of Columbia and then returned to the West Coast. A new similar exhibit to be used in the East will be ready for the South Carolina Fair in October.



In March, some members of the CFFP Committee attended the Planning Conference in Los Angeles for the 20th CFFP Campaign.

The talking Smokey Bear exhibit appeared in Chicago at the NAB Convention.

In May, the Presentation Conference for the 1961 Smokey Bear Program was held in Washington, D.C. Following the meeting, the CFFP Committee visited the beautiful State of Wisconsin.

In July, Jim Ricard of New Hampshire, was Smokey Bear at Colorado Springs, Colorado, during the Boy Scout Jamboree, and Smokey posters rode the Post Office trucks nationwide. A special TV and radio kit was sent to all TV and radio stations in the West by The Advertising Council, calling attention to the emergency forest fire conditions.

Smokey licenses were issued to Progressive Products, Inc., for a Smokey Bear pen and pencil set; to McGowan-Educator Food Company for Smokey cookies; to Leech & Leech, Inc., for Smokey Bear post cards; and Picture Pals for a Smokey Bear camera.

Ideal Toy Corporation has developed a new series of Smokey Bear dolls that are more appealing and more attractive than the old models.

Siber-Hegner & Co., has produced a new scarf for the Christmas trade that will show the many resources of the forest that Smokey protects from fire.

Finally, I'd like to give you a quick summary of what the Smokey Bear Program has achieved during the past five years.

#### SMOKEY BEAR ACHIEVEMENTS

(1955 through 1959)

During the past five years, the Smokey Bear Program has drastically reduced the number of forest fires in the United States. In 1955, the annual number of fires based on a five-year average was 165,719 fires. At the end of 1959, the annual number of fires, again based on the five-year average, had dropped to 115,006 forest fires. The acreage burned figures also dropped. Again based on five-year averages, the annual acreage burned figures dropped from 13,472,844 acres burned in 1955, to 5,149,114 acres burned in 1959.

During the past five years, the following achievements have been made:

In 1956, The Advertising Council held an Executive Board meeting on the West Coast for the first time. This meeting was held in San Francisco. Smokey Bear was featured as the outstanding campaign.

In 1957, forest fires dropped to an all-time low with only 83,392 forest fires reported and with acreage burned down to a record low of 3,409,038 acres burned.

In 1958, forest fires went up to 97,910 fires but acreage burned again dropped to 3,280,255 acres.

In 1958, a cooperative agreement was signed with the Canadian Forestry Association to protect the use of the Smokey Bear symbol in Canada.



In 1958, President Dwight Eisenhower presented the first Smokey Bear awards to four leading organizations for their work in forest fire prevention. These organizations were The Advertising Council, The American Forestry Association, American Forests Products Industries, and the School Children of America.

In 1959, a Smokey Bear float won the Governor's trophy in the Rose Bowl Parade at Pasadena.

The Smokey Bear program received the American Public Relations Association Silver Anvil award for the best public relations performance in the Agriculture category.

The Advertising Council held its annual Executive Board meeting at Los Angeles, the second time they scheduled their Executive Board meeting on the West Coast and again Smokey Bear was featured.

In 1959, a supplemental program aimed at stopping forest fires in the South was organized. Russ Eller, Coordinator of the National Program, became Coordinator of the Southern Program, and William W. Huber became Director of both the National and Southern Programs. However, a new advertising agency, Liller, Neal, Battle & Lindsey of Atlanta, Georgia, was selected to handle the Southern CFFP Program, while Foote, Cone & Belding, Inc., of Los Angeles, continued to handle the National Program. The theme of the SCFFP is to stop incendiary fires. The slogan used is - "Every time a forest fire strikes you get burned!"

In 1960, Reader's Digest sponsored another Smokey Bear ad. This is the second such ad donated as a public service by Reader's Digest, and reaches 11 million readers.

Of special interest is the way Smokey's booklets have become best sellers. Six million one hundred eighty thousand five hundred copies of Smokey Bear's Story of the Forest have been printed. Some states have been using this pamphlet in their elementary schools. All 6th grade children in Tennessee, for example, study this publication.

One million two hundred eighty-two thousand copies of Forest and Flame in the Bible and 1,053,200 copies of You and Forest Fires have been distributed.

We have purchased for the states and regional foresters 1,500,000 copies of the True Story of Smokey Bear from Dell Publishing Company.

Smokey is enlisting Junior Forest Rangers at the rate of 600,000 each year. By the end of 1960, 4 million children will have received Junior Forest Ranger Kits. Smokey Ranger Clubs are springing up all over the country and may soon become public relations problems in California, Georgia, New York, Mississippi, North Carolina, and West Virginia. In these states youth leaders have started some surprising projects with Junior Forest Ranger Clubs.

This strong youth movement to help protect our natural resources needs adult guidance. We have tried to put this energy to work with the new Junior Forest Ranger Handbook that sets up projects for these young people. We have encouraged their enrollment in other organized youth groups, such as the Campfire Girls, 4-H, Girl Scouts and Boy Scouts. But if this doesn't work, then it looks like we - the Association of State Foresters - will have to give some attention to organizing the Junior Forest Rangers.



The CFFP Committee commends the Association's policy for establishing a definite tenure of service on the "Smokey Bear" Committee. It is providing a continuity of planning and thinking that serves the Association to the best advantage.

#### ENJOY YOUR JOB by Frank M. Kleiler

Love of the job is a characteristic of successful executives. They may call the office a salt mine, or gripe to their wives about the headaches and heartaches in running an organization, but they would not want to be doing anything much different.

For them it is a sad day when they reach the age for retirement. Most firms have compulsory retirement policies because so many top managers would rather die in a swivel chair than in a rocking chair even though they have good pensions and investments to sustain them the rest of their lives.

There are bound to be frustrations, disappointments and unpleasant events in every career; but if you do not enjoy your work most of the time, the odds are against your getting ahead. This is one of the simple facts of life. The man who likes figures becomes an accountant or budget officer. The man who likes working with his hands becomes a skilled craftsman. The man who likes writing becomes an author. The man who likes music becomes a musician or composer. The man who likes talking becomes a salesman. And the more they enjoy their work, the more successful they become at it.

The worst failures usually are those who really did not like their occupations in the first place. Executives have such diversified functions that it is impossible to identify the thing that many of them like about their jobs; but most of the men at the top got there because they get fun out of solving problems and dealing with people. If you find such functions unpleasant, abandon any aspirations to becoming an executive.

Industrial psychologists many years ago discovered that happy workers produce more than unhappy workers. Enlightened management therefore is constantly alert for ways to increase job satisfaction among rank and file employees. Job satisfaction is even more important at supervisory and executive levels, but in most successful firms psychologists are not needed to invent ways and means for making executives happy. The chances are that the top boss enjoys his own work so much that he cannot appreciate other executives who dislike their jobs. The work-loving boss attracts and promotes work-loving employees. This is one of the big reasons why a man needs to like his job to get ahead.

The first rule of success is to get into a line of work that you enjoy. If you are trapped, better learn to like it.

Likes and dislikes sometimes are hard to change, but where there is a will there is a way. The school boy who dislikes arithmetic sometimes finds that it is fun once he gets the hang of it; and those who thought they disliked figures often acquire later a passion for computing the odds on a horse race or memorizing batting averages. Many a person needs to try something several times before he acquires a taste for it.

If you dislike your job, analyze it and find out why. Break it down into components, and the chances are that you will find only some parts of your job which you dislike. Moreover, the things that you do not enjoy doing probably are the things which you do poorly. Learn to do them better, and the whole job becomes more pleasant.



If there are some functions which you find disagreeable and simply cannot learn to like, try to make games of them. A salesman who enjoys meeting people but hates those long drives between calls develops the game of playing poker with license tag numbers, or more appropriately, mulls over in his mind ideas or methods he can use to interest the next prospect on his list.

If you cannot make a game of the objectionable part of the job, get into the habit of doing the unpleasant chore first. The secretary who hates filing needs to guard against letting her unfiled material pile up until a small obnoxious chore becomes a big one. The prospect of an unpleasant task which has been postponed too often creates a feeling of guilt which detracts from the enjoyment of other activities.

As you advance to positions with more responsibility, your job content becomes more diversified. This is one of the desirable features of executive life. It is rarely monotonous. But because he has a variety of things to do, a manager's job is more likely to contain unpleasant duties. Some executives succeed in delegating the obnoxious tasks to others and keep only the pleasant chores for themselves, but it is a mistake to plan a career with that objective in mind. Most of us have to mix the bitter with the sweet. Another weakness of some executives is that they concentrate on the things they like and neglect other responsibilities.

Along with more responsibility, every promotion will also bring more frustrations--subordinates who do not perform their duties as well as you would do them yourself, conflicting pressures from within the organization and pressures from outside. A perfectionist could be perpetually unhappy in an executive job, but a successful executive learns when to settle for something short of perfection. He also learns to roll with the punches and to conciliate big and little squabbles. Executive work is largely a process of effecting compromises--between impatient customers and the limitations of production, between employees and stockholders, between production supervisors and staff advisors, between diverse specialists who believe that their respective roles in your organization ought to be more important.

If you are unhappy on your job, perhaps it is because you are a perfectionist. No job is a bed of roses, and one of the ways of learning to like a job is to develop tolerance for the mishaps and shortcomings which are inevitable. Striving too hard for perfection--particularly on a job requiring you to rely upon the work of others--creates a danger that you will spend your time doing their work for them and consequently neglect some important aspect of your own job. Then you will start worrying about all the things you have neglected and become a miserable failure.

The trick is to set realistic goals--goals which can be attained. A golfer who has never beaten par gets his satisfaction from beating his own last week's score. So it is in industry. Set reasonable goals--for yourself as well as for your subordinates--and your chances of avoiding frustration and of becoming happy on the job are increased.

#### TAKING THE "HEART ATTACK" OUT OF EXECUTIVE TASKS by Ernest W. Fair

"Heart attacks" among business men have become an almost daily topic of discussion wherever office executives meet. The fatality frequency among business men due to this cause is a legitimate concern for every man who holds down a management job in an office today.

Many things are responsible for this frequency of occurrence and not the least of these is the constant pressure of today's management job. No month goes by without adding more and more to the management load. For this reason, it is of the utmost importance that every executive search for and use each possible idea which will aid in better planning and organizing of his work. Each offers an



assurance to getting the job done with less physical and mental strain.

With greater efficiency always comes relaxation of tensions. Any step one can take toward increasing the efficiency of one's performance on day-to-day management tasks will be a big deterrent toward prevention of joining these "heart attack" statistics. These are some of the steps being taken by many executives today.

1. "PLAN MORE STOPPING PLACES" -- That's a big must for no machine, human or mechanical, can continue at top running pace hour after hour ... even the human machine cannot stand four successive high tension hours regularly. There must be definite stopping places for ease of tensions built up during a past hour. Many executives are also finding such stopping places a definite aid in arriving at clearer decisions and more assured solutions to the problems they are working on.

Whenever or wherever one is tempted to "keep at it and get this job done" there indeed is a time for such a stopping place. This can be in the form of turning to something easier to do and which needs no strain of any kind or just doing nothing at all for a few moments. The "cost" involved in taking out frequent short periods of this nature will never be as great as it may seem; any lost productive effort is quickly made up in greater attainment of results during the definite "go" periods. Add to this the positive assets which are derived from approaching any problem without strain or physical tiredness and it always proves well worthwhile.

2. "CUT DOWN SEARCHING TIME" -- This is always a great efficiency waster in any executive's day. Greater use of better facilities and assignment of gathering of details to subordinates can not only add more hours to any executive's day but increase his efficiency during those hours.

Searching time during which we seek out information or data we may need is particularly detrimental in that it forces greater pressure on the remaining time available in the day with which to accomplish the task involved.

3. "ALTERNATE THE HARD AND EASY TASKS" -- No hard task exists that doesn't require pressure in its performance regardless of one's capability or efficiency. Nor can they be put aside or shifted onto the shoulders of someone else in the organization. One must cope with all involved in our management job each day without fail.

Lost efficiency comes about when one attempts to perform the hard tasks one after another. Alternating tasks keeps mental and physical strains below the boiling point. Stacking them up one after another builds up pressure which results in the inevitable explosion.

Though one may have top efficiency in handling the several projects, efficiency declines rapidly as one copes with subsequent assignments. The intermingling with "easy tasks" gives the executive the needed breather to relax and be somewhat refreshed for the hard one coming up.

4. "PLAN TO GROUP SPECIALIZED TASKS TOGETHER" -- It has been found by many executives that results are always better where they carefully group highly specialized chores for one attack so that data, information, thinking processes, etc., do not have to be "generated" many times during one day. Building up to the specialized job need be done only once and becomes automatic procedure when the job re-occurs the next day, week or month. Those who practice this principle deem it one of the most important in their daily business lives.



5. "MAKE WAITING TIME PRODUCTIVE TIME" -- This is a most neglected procedure in many executives' daily business lives. During times when waiting for procedures to develop in handling a major problem, careful planning, designed to develop unpressured thinking and physical steps on the job can relieve stacking up of work toward the end of the business day. It can also result in more accomplishment during an eight hour period without the need of even small pressures to clear the decks for action the next day.

6. "CHANGE TASKS ABOUT EVERY TWO HOURS" -- Here is a bit of advice for management executives offered by a number of experts who have studied the physical and mental strain problems involved. They point out that long routines at the same chores not only tend to decrease the efficiency of any individual but also build up nerves and physical strains which have damaging results as they accumulate over many months.

7. "START THE DIFFICULT OR DISLIKED TASK FIRST" -- This is definitely going against human nature, for we all tend to want to wade into the easy jobs and "get them out of the way," but it is a bit of self discipline that pays off handsomely.

Adherence to this rule will reveal how much easier each "difficult or disliked" project becomes while one is fresh of mind and body. There is also the fact that the longer we put off doing this type of work, the more tensions build up against the inevitable time coming when it must be tackled.

8. "DECREASE THE BACKTRACKING" -- Unless the average executive takes time out to analyze just how much such backtracking he does in an average day he has no comprehension of its volume. Most of it is sheer waste. Careful planning of all tasks and routines in one's daily business life can virtually eliminate this backtracking.

9. "LEARN THE RELAXED APPROACH TO EVERY JOB" -- This also runs counter to human nature but it is a positive asset well worth developing. Everything can be done better and more efficiently if one is relaxed, mentally and physically, before starting the chore.

The relaxed approach can be developed by keeping the idea constantly in mind as every chore is undertaken. It can be developed into a routine after a week or two of making certain that one stops and keeps it in mind before attempting any major business chore during the day.

10. "IF THE TASK CANNOT BE CHANGED--THEN CHANGE THE TEMPO" -- That's another good suggestion from the experts which can help to relieve mental and physical tensions that accompany routine management chores. It will also increase performance efficiency because the relaxation it provides assures clearer perception in attacking each new task.

There are many routine chores in any executive's day which must be accomplished over long periods of time and which cannot be broken up to secure relief of tension. Changing the tempo gives an alternate method of accomplishment which provides almost the same results as spacing more difficult work with less tiring procedures.

11. "DON'T LET UNFINISHED WORK BECOME A MONKEY ON YOUR BACK" -- This is a suggestion which can be followed by many individuals who add needless problems to their business existence by permitting unfinished work to cloud everything they



try to do. When the procedure cannot be tackled and completed immediately, it is definitely advantageous to set it aside completely until circumstances permit its completion. Since there is little that can be done about it, there is no point in permitting it to become an unnecessary burden on our mental processes which should be kept clear for other things.

In addition to the foregoing methods of organizing for greater efficiency, there are many other steps which can be developed by each individual. These include: 1. planning several "home stretches" or crash work times during the day instead of one long procedure, 2. fixing sub-goals as tension breakers in the effort toward completing major goals, 3. concentrating hard only on essentials and permitting minor problems to work themselves out, 4. making a determined effort to avoid muscular tenseness in the routine of one's work day and others which the circumstances individual to each office executive's position will reveal once a determined effort has been made to do something about the problem.

Whatever is done, each of us can be assured that we have not only made decisive and effective moves toward obtaining greater efficiency in our work but, at the same time, we have reduced the "heart attack" possibilities which exist in the executive position we hold in the business world today.

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#### LET CHILD LEARN ABOUT FIRE by Marylou Luther

Let your 5-year-old son light the campfire. Don't scold your 4-year-old daughter when she reaches an exploring finger to a hot plate.

This combustible advice comes from Dr. Harry F. Dietrich, who believes the more children know about fire, the less likely they are to get burned.

"During the first two years of life we must completely protect the child against all serious types of burns. He is at our mercy and must not be left where he can be consumed by fire nor scorched by heat, caustic, or actinic rays."

After this toddler stage, education should supplant 100% protection, according to the clinical professor of pediatrics at UCLA's medical school.

#### CONCEPT OF "HOT"

"First he must learn the concept of 'hot.' Instead of rewarding minor painful experiences with sweet words, the parent should objectively point to him cause and effect."

A simple "that's hot" or "it will burn" is much more effective, Dr. Dietrich said, than a screeching "No!" or "Don't!" which excite curiosity or rebellion.

"The youngster, warned, will touch, feel heat, and remember," the pediatrician continued. "There will not be resentment, but only an appreciative realization that the parent is a prophet who anticipated and tried to warn against pain."



## SATISFY CURIOSITY

Stage 2 of Dr. Dietrich's educational pyrotechnics "requires that parents temporarily satisfy the normal, inevitable curiosity of children by consciously demonstrating for them the properties of heat and fire as they are encountered in normal family living."

The pre-school child can be permitted to fetch matches, the UCLA professor believes, and blow them out after they have been used by a responsible adult. "He should be given an active part and responsibility, but no liberty, in making fires."

Explaining that young boys are more attracted to fire than girls of the same age, Dr. Dietrich said: "At 3½ to 4½ years, sex asserts itself. From this age on, the female's contact with fire and fire producing paraphernalia is largely accidental and coincidental to her other activities and interests."

Conversely, the male "begins actively, imaginatively and fiendishly to seek, invent, filch, test and use fire producing products."

This is not wicked, immoral, bad, or fundamentally even lamentable, said Dr. Dietrich, and is dangerous only if parents are not prepared for it.

In recommending that parents culture rather than curb this male attraction to fire, the pediatrician advised: "At 3 to 6 years, and under close supervision, these eager boys can take part in the laying and lighting of fires. They can carry and ignite refuse. They can plug and unplug and switch off and on selected electrical equipment." Under intelligent guidance they begin to gain if not an understanding, at least a respect for electricity and flammability "and are able to satisfy safely some of man's unconscious desire to demonstrate his control over fire and the gods thereof."

## EDUCATION PROCESS

As the educational process progresses children must learn, according to this expert, about the relative flammability of various substances, spontaneous combustion, methods of heat production, properties of electricity, and the nature and forces of explosion.

None of this education is to be crammed into uninterested ears or loaded on unwilling hands, he warned. "It is to be offered to curious and grateful young minds as a welcome substitute for uninformed and dangerous experimentation."

"Teach the children," he concluded, "and they will prevent your fires."

(Los Angeles Times - August 8, 1960)

## LETTER TO DEPUTY STATE FORESTER DUNOW FROM F. H. RAYMOND, STATE FORESTER

"I wish to acknowledge your letter of September 22, 1960, to which you attached a copy of a "Stake-out" plan developed by Ranger Jack D. Burke of the El Dorado Ranger Unit. Your letter explained that this plan is now being used in the El Dorado Ranger Unit.



"I reviewed the plan with a great deal of interest, and even though the general idea may not be original, the actual placing of the plan into effect on a definite programmed and operational basis is a real achievement. Such a plan deserves appropriate recognition, and I would like to take this opportunity to commend Ranger Burke on his initiative in placing this plan into action. Such a plan should be a definite objective towards which all district administrators and ranger unit supervisors should aspire and ultimately place into effect. Such a plan placed into action points up several significant factors which are quite important to this Division. The appeal to the "tax-minded" citizenry, State Department of Finance, and Legislative Analyst should definitely work to the benefit of the Division and will also provide a tool for a better analytical approach to the job and the responsibilities expected of us as servants of the people consistent with our over-all legal responsibilities. Too many times there is an expressed desire to place such an operational program into effect, but too often the actual placing of such a plan or program on an operational basis is never accomplished. An action plan of this type, I fully realize, will oft times result in departures from normal routines and too often the benefits may sometimes be unknown, obscure, and questionable. However, in the final analysis I firmly believe that results will be accomplished which will far out-weigh the negative aspects which might be a probability and are often raised, by not only our own employees, but by the uninformed public.

"It is quite possible that other ranger units have placed varying types of programs or plans into effect on a less extensive or intermittent basis. It would be highly desirable to have a written record of such activities, if possible, for future use and review. I wish to reiterate my desire that you express to Ranger Burke special commendation and recognition of the excellent manner in which he outlined the plan for operation within his Ranger Unit."

#### MERIT AWARDS

During the past four months a few of our Divisional employees have earned a little cash. How did they do it and how can you do it? Just a little effort on your part, it might not be any effort at all, who knows - but you. All there is to it - is for you to submit a merit award suggestion.

We have had five employees who have earned credit recently and more suggestions are being processed for evaluation. These employees are: Weston J. Wyllie, Assistant State Forest Ranger of District III (cash award of \$10.00); Vernon Wellendorf, Truck Driver of District IV (cash award \$15.00); George Phibbs, State Forest Ranger III - District IV (certificate of commendation); and Laurence L. Young, Assistant State Forest Ranger - District VI (\$30.00).

The Merit Award Suggestion Program is designed to improve operations of our State Government. Employee suggestions are submitted directly to the Merit Award Board, which in turn refers the suggestion to all Departments to which the suggestion may be applicable. Departments then refer the suggestions to appropriate Divisions for evaluation. There are two factors in the investigation of each suggestion which frequently require much time and work for those doing the investigation, they<sup>are</sup> (1) getting all the facts and; (2) evaluating the facts for award purposes. Revisions are sometimes made in suggestions so that they may take a different form than that in which they were originally submitted. Many times this occurs when the suggestor submits a suggestion which has not been



completely worked out in detail. Make your suggestions complete - think them through and provide the details so the idea can be given a more thorough evaluation in less time. The decision to adopt a suggestion is generally made by operating or staff officials of one or more agencies. Final action taken by the Merit Award Board is based on all evaluations submitted.

Do you have a suggestion? Try it - Help improve our services.

Deane Bennett  
Training Section

#### PERSONNEL CHANGES

James G. Dougherty promoted to Assistant Forestry Superintendent, Conservation Camp, Iron Mine CDC Camp, District III, September 15, 1960.

Robert R. Brownlee promoted to Assistant Forestry Superintendent, Conservation Camp, Magalia CDC Camp, District II, November 1, 1960.

Fred W. McGregor promoted to Assistant Forestry Superintendent, Conservation Camp, Mt. Home CDC Camp, District IV, October 1, 1960.

Jack R. Wilcher promoted to Assistant Forestry Superintendent, Conservation Camp, Mobile Camp, District IV, October 1, 1960.

Richard L. Miller promoted to Assistant State Forest Ranger, San Diego Ranger Unit, District VI, September 1, 1960.

Francis F. Musser promoted to Assistant State Forest Ranger, Tehama Ranger Unit, District II, October 1, 1960.

Raymond C. Penney promoted to Assistant State Forest Ranger, Tehama Ranger Unit, District II, October 1, 1960.

Hector Reed promoted to Assistant State Forest Ranger, Riverside Ranger Unit, District VI, October 1, 1960.

Lawrence L. Young promoted to Assistant State Forest Ranger, Orange Ranger Unit, District VI, October 1, 1960.

The following appointments were made in the Sacramento-Administration Office:

Walter D. Harkness promoted to Forestry Equipment Engineer, Fire Control Section, on October 1, 1960.

Elder O. Lovelady, Electrician Foreman, transferred from the Department of Corrections to the Engineering Section on September 6, 1960.

Rose Ann Marchi, Intermediate Stenographer Clerk, transferred from the State Water Rights Board to the Personnel Section on October 17, 1960.



Charlotte A. Cotton, Intermediate Typist Clerk, to the Davis Warehouse on October 17, 1960.

Alice M. Burggrabe reinstated as Intermediate Typist Clerk, Fiscal Section, on October 5, 1960.

Monica A. Rodas to limited-term Intermediate Typist Clerk, Fire Prevention Section, on September 19, 1960.

Georgene G. Albright from limited-term to permanent Intermediate Typist Clerk, Fire Prevention Section, on September 7, 1960.

#### FROM ENGINEERING SECTION, HEADQUARTERS OFFICE

Charles O. Walker: Our Land Surveyor, Charles Walker, passed away on September 19th in Fort Bragg while working on the Jackson State Forest survey. He had been with our Division for the past 4½ years working throughout the State with the survey crew. He will be greatly missed by all his friends here in the headquarters office, and by the friends he made throughout the field.

Susanville Center: Ground breaking ceremonies for the Conservation Center in Susanville were attended by Director DeWitt Nelson, George Grogan, Herb Kaufner, Harry McKeen, and L. T. Petersen. The Governor and party was about an hour late, otherwise everything went off as scheduled. Mrs. Pauline Davis, Assemblywoman, made special mention that she wanted to see in Forestry's and Fish and Game's budgets sufficient funds to make effective use of the men to be made available by this center. Incidentally, the low bid on this large construction job was \$8,140,000.

Deer Hunting? -- Certain people in the engineering staff had some woodsmanship and hunting techniques demonstrated to them on packing out deer. To add insult to injury this engineer had the able assistance of the top woodsman in the organization, and this top woodsman is very closely allied with the supreme potentate of all the forestry matters in the organization.

Anyhow, to make a long story short, these two wild woodsmen were contemplating pack animals to make their annual sojourn after the elusive and wily deer bucks. So, being the cautious and prudent managers that they are, they reconsidered their use of animals and chose instead to use a vehicle that they had more control over and also could pack out more meat. They talked about travelling at the unusually fast pace of 1 mile per hour; however, 2/3 of the hour was taken up in pushing and moving this iron horse around and over obstacles. The question is whether they would have brought out more meat if they hadn't had to carry out the jeep as well.

Anyway, we hear these stories, but we haven't seen the venison. There is no need to identify this forest manager and engineer, but needless to say they are the top exponents of forestry, as well as deer hunting and packing out venison.

#### MCCLURE LAKE PROJECT

On July 1, 1960, the Division of Forestry, under contract with the Department of Fish and Game, undertook the rebuilding of a dam at McClure Lake. The project, accomplished by a crew from the Mount Bullion Youth Conservation Camp, was unusual in several respects. The project involved a temporary spike camp 15 miles by trail from the end of the closest road. The job was located in a "Wilderness



Area" in Madera County at an elevation of 9,860 feet. Needless to say, living and working conditions were quite primitive.

In spite of numerous difficulties, the Mount Bullion Youth Conservation Camp crew did their usual fine job. The wards, Foremen, and Supervisors worked (and fished, in off hours) with enthusiasm completing the job to the satisfaction of the Department of Fish and Game. The crew was able to hike down the trail on September 9th leaving behind a good job well done.

During the time the project was underway many official inspections were made. One such inspection made by Mr. Victor Kirk resulted in a complete report to the Chief, Division of Diagnosis and Treatment, Department of the Youth Authority. Following are excerpts from Mr. Kirk's report

"The trip to the McClure Lake Project is about a 12-hour trip and communications with the pack station are quite poor . . . . The journey to the pack station is over 35 miles of dirt mountain road above Bass Lake to the 8,000 foot level. This stretch of road takes approximately two hours to cover and the use of vehicles to make this trip is not recommended. Should any other officials need to make this trip at a later date, it is recommended that they request a State car with the most clearance possible for the trip. It is also suggested that the gas tank be full before leaving the Bass Lake area as the only gas available from there on is what one might borrow from some fisherman along the way.

"The pack ride from the pack station to McClure Lake is approximately 15 miles distance and climbs to the 9,550 foot level. This ride takes about four and one-half hours going up and four hours coming down. Experts informed me, should there be a choice as to type of animal desired, that a saddle mule is much smoother than a horse; also, some of the newer saddles have a foam rubber seat, but mine did not. The camp site at McClure Lake is laid out quite efficiently insofar as the wards' tents, staff tents, cook tents, etc., are concerned. . . . In anticipation of raising the water level, the old earthen dam has been completely cleared and work is beginning on the base of the new dam. . . . The wards at the Lake appeared to be thoroughly enjoying this experience, although they were a ragged looking lot - clothes appeared to be dirty, faces were unshaven, and all were in badly need of haircuts. I was informed that handclippers had been ordered and were expected the next day, at which time a 'hair-cutting' party was planned. . . .

"Forestry, Fish and Game, and Youth Authority staff at the camp were all well pleased with the performances of the wards and especially with their work output. Some wards were chopping trees after supper for recreation, while others were fishing or telling stories. I understand that the fishing novelty has worn off some, but that approximately 200 trout had been taken out of McClure Lake and other nearby lakes during the past three weeks. The large transistor radio which was purchased by Mt. Bullion for this project appears to be in operation about 16 hours a day, keeping all informed of the news of the day, especially the ups and downs of the Giants and the Dodgers. Other radio communication facilities are available and provide immediate contact with the district office in Fresno and helicopter service is available in cases of emergency. To date no serious accident has occurred except the incident in which Mr. John Clarke, Mt. Bullion Forestry Superintendent, broke his hip in a fall from a horse. Other injuries have amounted to only a few scratches and bruises that were taken care of by the Group Supervisors."



### DISTRICT III

The other day Bill Branch from the Regional Office of the U. S. Forest Service dropped in to show some foresters from Hawaii the Mt. Danaher Lookout tower. While the visitors were absorbing the magnificent view afforded by this tower, Bill indicated that he was certain that the Forest Service had no tower in the California Region quite as tall.

This fired our curiosity to the point where now we feel we should claim to have the highest tower in the State - 100 feet by measurement from the ground level to the base of the floor. Of course, we may only hold this record for a month or two as the next issue of the News Letter may present an even taller specimen. At any rate until we are challenged in this claim to fame we shall continue to bask in our glory!

Jack D. Burke  
State Forest Ranger

### DISTRICT IV

We have thoroughly canvassed the field to determine the feeling of a great number of people in the various classes as to the value of our official News Letter. The feeling was unanimous that it would be a distinct loss to discontinue this publication.

The personnel do not appear to be too much concerned about the technical aspects of the pamphlets since many people in various classes belong to technical organizations and get technical matters through that medium. They do look forward to keeping up with personnel transfer, general "gossip" and keeping abreast with the highlights of what is going on in other Districts of our far-flung Division.

Speaking in behalf of District IV employees, we sincerely hope that the News Letter will not be discontinued. If this level has been delinquent in helping you keep the News Letter more newsy, we assure you we will make an honest endeavor to correct our deficiencies.

C. E. Metcalf, Deputy State Forester

### LETTER TO RANGER LINDLEY

"Dear Curt:

"Again our Fair was a success and again your contribution toward its success was invaluable. It would be extremely difficult to over-estimate the contribution that you have made, not only this year's Fair, but also preceding Fairs. Your willingness, constant good humor and ability are certainly appreciated by me, my Board of Directors, and the people you so ably assist. In our opinion you are a true fireman. The number of "fires" that you put out for me every year saves a real scorching of my hide.

"We also appreciate and recognize the value to our Fairgrounds, the exhibit that you have built and maintained on this Fairgrounds. It is a continual source of pleasure and favorable comment to people of this county.



"The Board and I take pride in counting you among our friends.

"Sincerely

"Bates T. Bowers, Secretary-Manager

"Kings District Fair."

Foreman Jack Bixler and his wife Mary are keeping us well posted. They are on vacation and we have had cards from Utah, Colorado, New Mexico, and Arizona. They will wind up their circle tour in Southern California.

The next one was a girl again! Congratulations to FTD and Mrs. Cloys Mathews (Kit Carson-Guernsey).

Florence P. Appell  
Dispatcher-Clerk

#### KINGS COUNTY

During Fire Prevention Week OUR boss was invited to a luncheon. Following the dessert course, the prime purpose was revealed! He was presented with a plaque inscribed to State Forest Ranger C. E. Lindley.

"In appreciation of exceptional public service in the field of Fire Prevention and Control by the Hanford Insurance Agents Association."

We recently extended our Mutual Aid to the City of Hanford when the Caminol Refinery had a spectacular fire at the gasoline plant. An estimated \$50,000 damage to the thermo cracking center was reported.

Two trucks from Hanford, a truck from Armona, Kit Carson and the Kit Carson Volunteers were dispatched to aid crews from the city department and Caminol employees who averted a potential city-wide disaster.

The fire was discovered shortly after noon October 7th when a fuel line leading to the tower ruptured to allow vapors heated between 600 and 800 degrees to escape at pressure of more than 60 pounds. The towering mushrooms of black smoke and flames were clearly visible more than a mile away.

Three employees who were eating lunch in a control room about 20 feet away narrowly missed being burned to death. They detected vapors before they became ignited and managed to clear out seconds before the fire began. The fumes seeped over to the Lincoln Elementary School and the children were evacuated from their classrooms.

Nearby the actual blaze were several storage tanks filled with gasoline and jet plane fuel and only a few feet away was a gasoline pipeline. The equipment and materials in the immediate area were valued at \$500,000.

Avenal was the host for our annual dinner meeting this month. As always, the females in this gang showed their culinary skill with salads and pies. The underground barbecued beef was prepared by C.E.L. who has quite a reputation for his cooking art.

The challenge of rod and gun has lured Ranger Lindley to Kioskia, Idaho, for part of his vacation.



Subdivisions are springin' up all over the county. The impact is due to the tire factory (construction bids to be let in December), and the anticipated October, 1961, completion of the Lemoore Jet Naval Air Base. Our crystal ball reveals there will be an expanded fire control department.

Luther R. Routt  
Assistant State Forest Ranger

LETTER TO RANGER DULITZ FROM DAVE ETHRIDGE, KATY am/fm, SAN LUIS OBISPO


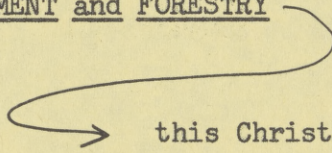

"I want to extend sincere thanks on behalf of myself and the entire staff of KATY for the fine cooperation we have received from you and your staff during this fire season. Through KATY news we have been able to present accurate and informative coverage of the various fires which would have been impossible without that cooperation.

"Several people immediately come to mind as being especially praiseworthy. Steve Nash-Boulden and Mary Davis have been most helpful on several occasions. And during the Weferling Fire, the tireless efforts of Richard Diltz were invaluable to us, as they must have been to you.

"I understand that the big fire was the first occasion in this area for the use of a special information officer. We appreciate this arrangement very much, for it allows us to keep up to date without bothering those directly concerned with fighting the fire. Dick did an excellent job and we hope that if, unfortunately, we ever have another fire of that size, he will again be calling the action."

\* \* \* \* \*

\* \* \* \* \* Advertisement \* \* \* \* \*

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Subdivisions are springing up all over the country. The impact is due to the fire factory (construction bids to be let in December), and the anticipated October, 1961, completion of the Jomopo Jet Naval Air Base. Our crystal ball reveals there will be an expanded fire control department.

Letter to Ranger Dullitt from Dave Riddick, Katy and Sam Luis 081270  
Assistant State Forest Ranger  
I have been in contact with you for some time and have been very interested in the work you are doing. I am sure that you will find this letter of interest.

I want to extend sincere thanks on behalf of myself and the entire staff of KATY for the fine cooperation we have received from you and your staff during this fire season. Through KATY we have been able to present accurate and informative coverage of the various fires which would have been impossible without that cooperation.

"Several people immediately come to mind as being especially helpful. Steve Nash-Bondman and Mary Davis have been most helpful on several occasions. And during the Western fire, the tireless efforts of Richard Oliver were invaluable to us, as they must have been to you. Valuable R. C. Rogers, senior staff of Riddick."

"I understand that the big fire was the first occasion in this area for the use of a special information officer. We appreciate this arrangement very much for it allows us to keep up to date without bothering those directly concerned with fighting the fire. Dick did an excellent job and we hope that it will be repeated we may have another fire of that size, he will again be calling the action."

His wife has worked six R.C. Rogers, senior staff of Riddick. Valuable R. C. Rogers, senior staff of Riddick.

Will have a new 1967 station wagon with a 1500 cc. engine and a 1500 cc. engine. The car is a new 1967 station wagon with a 1500 cc. engine and a 1500 cc. engine.

Consider the CDF book: The California Department of Forestry and Fire Protection. The California Department of Forestry and Fire Protection. The California Department of Forestry and Fire Protection.

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